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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,327	12/19/2003	Tadahiko Ikeya	YAMA:062	6905

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EXAMINER	
WARREN, DAVID S	

ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

IV

Office Action Summary	Application No.	Applicant(s)	
	10/741,327	IKEYA, TADAHIKO	
	Examiner	Art Unit	
	David S. Warren	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) *7,8,15 and 16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 9-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/19/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9 – 14, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As per MPEP 2106 (IV)(B)(1)(a), the claims must positively recite a "computer-readable medium" and not merely a computer program per se. For the Applicant's convenience, the appropriate section of the MPEP is as follows:

> Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, ***without the computer-readable medium*** needed to realize the computer program's functionality, as ***nonstatutory functional descriptive material***. [Emphasis added].

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The title of the invention refers to an *automatic* performance apparatus, the preamble to independent claims 1 and 9 refers to an *automatic* performance apparatus, the preamble to claims 3 and 11 refers to an *automatic* performance apparatus, therefore, it is not understood how the *manual* performance data is related (or relevant) to the automatic performance apparatus. This is especially confusing since the Applicant has defined style data as an accompaniment data (I.e., automatic accompaniment). Claims 3 and 11 appear to claim that the automatic style data is manual. Correction or clarification is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 4 - 6, 9, 10, and 12 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakata (5,824,932) in view of Aoki et al. (6,245,984). Regarding claims 1 and 9, Nakata discloses the use of storing song and style data with associated tempo and meter data (for song and style storage, see col. 8, lines 46 – 48; for song tempo and meter, see col. 4, lines 26 – 30; for style tempo and meter, see col. 3, lines 63 – 65 and the sentence bridging cols. 4 and 5), accompaniment data (col. 8, lines 41 – 45), and the need to compare and match the song data with the style data (see the

second and the last sentence of the Abstract). Nakata does not disclose searching the style storage for style tempo (and/or meter) to match song tempo (and/or meter). Aoki discloses searching for a rhythm pattern (i.e., tempo and meter) to match a motif (col. 12, lines 43 – 48). It would have been obvious to one of ordinary skill in the art to combine the teachings of Nakata and Aoki to obtain a system to match song and style data by searching for corresponding tempo and meter data. The motivation for making this combination is that matching a song with a style of different tempo (or meter) would not sound pleasing. The motivation for adding the searching feature, would be to allow a user of the Nakata device to choose a song and automatically select a style, thus creating an "automatic performance" (as suggested by Nakata) or a composition technique (as suggested by Aoki). Regarding independent claims 4 and 12 and dependent claims 6 and 14, all limitations have been discussed supra except the style setting portion and the style setting storage portion. Nakata discloses "selecting" a style (presumably from a "set" of style data): as Applicant has defined, this is synonymous with "setting" a style, see Applicant's specification paragraph [0011], where Applicant states:

> The style setting portion prepares style setting data indicating style data selected from among the sets of style data stored in said style storage portion.

Nakata also discloses storing the selected style data in accordance with the song (the Examiner notes that the Applicant's specification defines the setting storage portion as merely storing the "prepared" style data, and that "prepared" has been defined as "selecting," see paragraph [0011]). Regarding claims 2, 5, 10, and 13, Nakata discloses that the song data includes both a melody and chords (col. 8, second paragraph).

6. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakata in view of Aoki as applied to claims 1, 2, 4, 5, 9, 10, 12, and 13 above, and further in view of Takeuchi et al. (5,998,724). Regarding claims 3 and 11, as best as can be understood (see §112 rejection supra), neither Nakata nor Aoki disclose the use of style data including tone color for manual performance. Takeuchi discloses the use of selecting tone color for manual performance (see steps S2 and S3 in fig. 3). It would have been obvious to one of ordinary skill in the art to combine the teachings of Nakata and Aoki with Takeuchi to obtain a means for selecting a manual tone color. The motivation would be to provide a style with correct timbres (e.g., to provide a polka-style with a tuba and banjo instead of, say, gamelan and heavy metal guitar).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Warren whose telephone number is 571-272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2837. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dsw

LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER